

Document made available under the Patent Cooperation Treaty (PCT)

International application number: PCT/US05/003623

International filing date: 04 February 2005 (04.02.2005)

Document type: Certified copy of priority document

Document details: Country/Office: US
Number: 60/542,779
Filing date: 06 February 2004 (06.02.2004)

Date of receipt at the International Bureau: 03 March 2005 (03.03.2005)

Remark: Priority document submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b)



World Intellectual Property Organization (WIPO) - Geneva, Switzerland
Organisation Mondiale de la Propriété Intellectuelle (OMPI) - Genève, Suisse

1288802

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

February 24, 2005

THIS IS TO CERTIFY THAT ANNEXED HERETO IS A TRUE COPY FROM THE RECORDS OF THE UNITED STATES PATENT AND TRADEMARK OFFICE OF THOSE PAPERS OF THE BELOW IDENTIFIED PATENT APPLICATION THAT MET THE REQUIREMENTS TO BE GRANTED A FILING DATE.

APPLICATION NUMBER: 60/542,779

FILING DATE: February 06, 2004

RELATED PCT APPLICATION NUMBER: PCT/US05/03623



Certified by

Under Secretary of Commerce
for Intellectual Property
and Director of the United States
Patent and Trademark Office

020604 17231 U.S. PTO

Please type a plus sign (+) inside this box → ☐

Approved for use through 01/31/2001. OMB 0651-0037
Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

22154 U.S. PTO
60/542779

020604

PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53 (c).

INVENTOR(S)					
Given Name (first and middle (if any))		Family Name or Surname		Residence (City and either State or Foreign Country)	
D. Glenn Purcell		Purcell		Edwardsburg, Michigan	
<input type="checkbox"/> Additional inventors are being named on the _____ separately numbered sheets attached hereto					
TITLE OF THE INVENTION (280 characters max)					
DAMPENING AND RETRACTION MECHANISM FOR A LANCING DEVICE					
Direct all correspondence to: CORRESPONDENCE ADDRESS					
<input type="checkbox"/> Customer Number		<input type="text"/>		<div style="border: 1px solid black; padding: 5px;">Place Customer Number Bar Code Label here</div>	
OR Type Customer Number here					
<input checked="" type="checkbox"/> Firm or Individual Name		Elizabeth A. Levy, Esq.			
Address		Bayer Healthcare LLC			
Address		P. O. Box 40			
City		Elkhart		State	Indiana
Country		USA		ZIP	46515-0040
		Telephone		574/264-8394	Fax
				574/262-7564	
ENCLOSED APPLICATION PARTS (check all that apply)					
<input checked="" type="checkbox"/> Specification Number of Pages		3		<input type="checkbox"/> Small Entity Statement	
<input checked="" type="checkbox"/> Drawing(s) Number of Sheets		1		<input type="checkbox"/> Other (specify)	
METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT (check one)					
<input type="checkbox"/> A check or money order is enclosed to cover the filing fees				FILING FEE AMOUNT (\$)	
<input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number:				13-3375	
				\$160.00	
The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.					
<input checked="" type="checkbox"/> No.					
<input type="checkbox"/> Yes, the name of the U.S. Government agency and the Government contract number are:					

Respectfully submitted,

SIGNATURE Elizabeth A. Levy
TYPED or PRINTED NAME Elizabeth A. Levy
TELEPHONE 574/264-8394

Date 02/05/04

REGISTRATION NO. 34,375
(if appropriate)
Docket Number: MSE #2695

USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT

This collection of information is required by 37 CFR 1.51. The information is used by the public to file (and by the PTO to process) a provisional application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the complete provisional application to the PTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, D.C., 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Box Provisional Application, Assistant Commissioner for Patents, Washington, D.C., 20231.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
PROVISIONAL APPLICATION FOR U.S. LETTERS PATENT FOR:

Invention of: D. Glenn Purcell

Entitled: DAMPENING AND RETRACTION MECHANISM
FOR A LANCING DEVICE

Docket No.: MSE #2695

CERTIFICATE OF MAILING BY 'EXPRESS MAIL'

"EXPRESS MAIL" Mailing Label Number FB166308318US

Date of Deposit February 6, 2004

I hereby certify that this paper or fee is being deposited with the United States Postal Service 'EXPRESS MAIL POST OFFICE TO ADDRESSEE' Service under 37 CFR 1.10 on the date indicated above and is addressed to Mail Stop-PROVISIONAL APPLICATION, Hon. Commissioner for Patents, P. O. Box 1450, Alexandria, VA 22313-1450

Gayle Gestick

(Typed or Printed Name of Person Mailing Paper or Fee)

Gayle Gestick

(Signature of Person Mailing Paper or Fee)

2/6/04

(Date of Signature)

MEMO OF INVENTION

A. Brief descriptive title.

Dampening and Retraction Mechanism for a Lancing Device

B. Project No. 215013____; **Project Name** Minimal Invasive_____.

C. This invention relates to (1) a machine (tool, article, device, apparatus, etc.), (2) a process (production, fabrication, use, treatment, etc.) (3) composition of matter (compound, formulation, etc.), (4) new use of known machine, process or composition, and/or (5) improvement. (Circle as many as seem applicable.)

Device

D. State the anticipated commercial application of the invention.

The dampening and retraction mechanism that could be incorporated into our existing Microlet device. It could also be implemented into a new lancing device to improve reliability and performance and/or be incorporate into a blood glucose instrument with an integrated lancing device.

E. State precisely what your invention is. Indicate what problem was solved and how you solved it. (Attach extra pages if needed.)

A dampening and retraction mechanism, which could be incorporated into the existing Microlet that would retract the needle from the puncture site and eliminate multiple punctures, caused by oscillation of the lancet drive mechanism. It would also eliminate the attachment of the drive spring to the lancet holder, simplifying the assembly and helping reduce spring oscillation, which is currently transferred directly to the lancet. The current design relies upon part interference to dampen the lancet holder and control the amount of lancet oscillation. Due to part and assembly variations, the amount of interference can be excessive or none. Excessive interference can reduce the lancet force and adversely effect the puncture depth, causing insufficient sample size and the need to lance again. No interference would result in lancet oscillation, resulting in multiple punctures believed to increase pain. The purposed mechanism incorporates a counter spring force, placed opposite the drive spring, to retract the lancet and control the oscillation of the lancet drive mechanism.

F. Indicate whether a literature and/or patent search has been performed, and if so, the nature and extent of such search..
no

Whether or not a search has been performed, list the references, patents, existing products, etc. which you believe to be most relevant to the invention.

G. State how your invention differs from the items listed in F. List the advantages which your invention has over same. (Attach extra pages if needed.)

- H. Briefly describe how your machine operates, your process is carried out or your product is made and used. (Attach extra pages if needed.)**

The device consists of a retraction and rebound spring mechanism which applies a force opposed to the lancet drive mechanism. The retraction and rebound spring is placed between the end of the lancet holder, end opposite the lancet, and against the opposite side of the supporting wall of the lancet drive mechanism spring. The retraction and rebound spring applying the opposing force is compressed as the drive mechanism is released, firing the lancet against a stop. At the time the lancet hits the stop, the retraction and rebound spring starts to expand and retracts the lancet from the finger and restricts the distance of the rebound, which will eliminate a second lancet puncture to the finger.

- I. Date you first thought of the invention?**

Identify the records you have to substantiate this date, including books, letters, notes, reports, etc.?

CAD files that document the design.

Models built to prove design.

Highspeed videos to prove function of design.

- J. To whom did you first disclose (orally or in writing) this invention?**

On what date and where did you make such disclosure?

What written evidence do you have of this disclosure to others?

- K. When did you first do any actual experimental work toward carrying out the invention? (Identify laboratory notebooks by number and page.)**

Built Model in

When did you first demonstrate the operation of the invention performing its intended function (i.e., a demonstration of utility or a demonstration of pharmacological activity)?

Highspeed videos performed by _____ in

- L. Who has observed the progress of your experimental work?**

- M. Identify all individuals who worked on the invention and indicate the nature of each individual's contribution. (Include authors of this MOI.)**

Name	Contribution
_____	Inventor _____
_____	Built Models _____
_____	Tested Models _____
_____	_____
_____	_____

- N. Identify any Memo of Invention (MOI) or patent application related to this invention.**

- O. Has any commercial manufacture, use or product sale begun?**

_____ yes X no _____ If yes, provide details.

When is commercial manufacture, use or any offer for sale anticipated?

- P. Has any information concerning this invention been disclosed outside Miles? (Include oral discussions with third parties, publications, advertising, market research, test marketing, etc.)**

No

Is any such outside disclosure anticipated? Explain.

